

# 5 2185

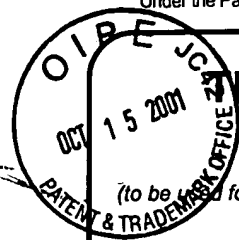
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RPTO/SB/21 (08-00)

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# TRANSMITTAL FORM

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Total Number of Pages in This Submission

1

Application Number

09/912,068

Filing Date

07/23/01

First Named Inventor

Zhang

Group Art Unit

2185

Examiner Name

Unassigned

Attorney Docket Number

20510-001700US

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## ENCLOSURES (check all that apply)

☐ Fee Transmittal Form

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☐ Affidavits/declaration(s)

☐ Extension of Time Request

☐ Express Abandonment Request

☒ Information Disclosure Statement

☐ Certified Copy of Priority Document(s)

☐ Response to Missing Parts/ Incomplete Application

☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

☐ Assignment Papers (for an Application)

☐ Drawing(s)

☐ Licensing-related Papers

☐ Petition Routing Slip (PTO/SB/69) and Accompanying Petition

☐ Petition to Convert to a Provisional Application

☐ Power of Attorney, Revocation Change of Correspondence Address

☐ Terminal Disclaimer

☐ Request for Refund

☐ CD, Number of CD(s)

☐ After Allowance Communication Group

☐ Appeal Communication to Board of Appeals and Interferences

☐ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)

☐ Proprietary Information

☐ Status Letter

☒ Other Enclosure(s) (please identify below):

1) seventeen (17) cited references

2) Return receipt postcard

Remarks

The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

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## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm and Individual name

Townsend and Townsend and Crew LLP

Charles L. Hamilton

Reg No. 42,624

Signature

*Charles L. Hamilton*

Date

October 9, 2001

## CERTIFICATE OF MAILING

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PA 3175190 v1



PATENT  
Attorney Docket No.: 020510-001700US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Song Zhang et al.

Application No.: 09/912,068

Filed: July 23, 2001

For: METHOD AND SYSTEM FOR  
TURBO ENCODING IN ADSL

Examiner: Unassigned

Art Unit: 2185

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98

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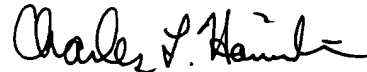
Sir:

The references cited on the attached PTO/SB/08B form are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information, and no inference should be made that the information and references cited are, or are considered to be material to patentability because they are in this statement. No inference should be made that the information and references cited are prior art merely because they are in this statement.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



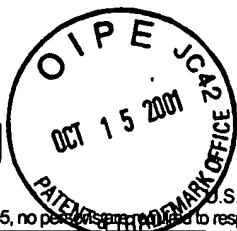
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Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 1

### Complete if Known

Application Number	09/912,068
Filing Date	07/23/01
First Named Inventor	Zhang
Group Art Unit	2185
Examiner Name	Unassigned
Attorney Docket Number	20510-001700US

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	Bahl et al., "Optimal Decoding of Linear Codes for Minimizing Symbol Error Rate," <u>IEEE Transactions on Information Theory</u> , IT-20:284-287 (1974).	
	2	Benedetto et al., "Parallel Concatenated Trellis Coded Modulation," <u>IEEE ICC96</u> , pgs. 974-978 (1996).	
	3	Benedetto et al., "Serial Concatenation of Interleaved Codes: Performance Analysis, Design, and Iterative Decoding," <u>TDA Progress Report 42-126</u> , pages 1-26, Augst 15, 1996.	
	4	Berrou, C., "Near Optimum Error Error Correcting Coding And Decoding: Turbo-Codes," <u>IEEE Trans. Communications</u> , 44(10):1261-1271 (1996).	
	5	Chase, D., "A Class of Algorithms for Dcoding Block Cdes With Channel Measurement Information," <u>IEEE Transactions On Info. Theory</u> , IT-18(1):170-181 (1972).	
	6	Divsalar et al., "Turbo Codes for PCS Applications," <u>IEEE ICC95</u> , Jet Propulsion Laboratory, Cal Inst. Tech., pgs. 54-59 (1995).	
	7	Divsalar et al., "Multiple Turbo Codes for Deep-Space Communications," <u>TDA Progress Report 42-121</u> , pages 66-77, May 15, 1995.	
	8	Gallager, R.G., "Low-Density Parity-Check Codes," <u>IRE Transactions on Information Theory</u> , pages 21-28 (1992).	
	9	Hagenauer et al., "A Viterbi Algorithm with Soft-Decision Outputs and its Applications," <u>IEEE Global Telecommunications Conference</u> , held 11/27-30/1989, Dallas TX., pgs. 1680-1686.	
	10	Le Goff et al., "Turbo-Codes and High Spectral Efficiency Modulation," <u>IEEE ICC94</u> , pages 645-649, (1994).	
	11	MacKay, D., "Good Error-Correcting Codes Based on Very Sparse Matrices," <u>IEEE Transactions on Info. Theory</u> , 45(2):399-431 (1999).	
	12	MacKay et al., "Near Shannon limit performance of low density parity check codes," <u>Electronics Letters</u> , 32(18):1645-1646 (1996).	
	13	Pyndiah, R.M., "Near-Optimum Decoding of Product Codes: Block Turbo Codes," <u>IEEE Transactions on Communications</u> , 46(8):1003-1010 (1998).	
	14	Robertson, P., "Illuminating the Structure of Code and Decoder of Parallel Concatenated Recursive Systematic (Turbo) Codes," <u>IEEE GLOBECOM94</u> , pages 1298-1303 (1994).	
	15	Robertson et al., "Bandwith-Efficient Turbo Trellis-Coded Modulation Using Punctured Component Codes," <u>IEEE J. Selected Areas in Communications</u> , 16(2):206-218 (1998).	
	16	Ungerboeck, G., "Channel coding with Multilevel / Phase Signals," <u>IEEE Trans. Info. Theory</u> , IT-28(1):55-67 (1982).	
	17	"New Proposal of Turbo Codes for ADSL Modems," ITU Standard Collection, Study Group 15, Question 4/15, BA-020R1, Antwerp, Belgium, June 19-23, 2000.	

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<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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